

### **REMARKS**

An excess claim fee payment letter is submitted herewith for four (4) excess independent claims.

Claims 1-14 are presently pending in this application. Claims 1 and 7 have been amended to more clearly and particularly define the invention. Claims 8-14 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chung (U.S. Patent No. 6,496,493). Claim 7 stands rejected under 35 U.S.C. § 102(b) as being unpatentable over Israelsson (U.S. Patent No. 5,293,643).

These rejections are respectfully traversed in the following discussion.

#### **I. ILLUSTRATIVE, NON-LIMITING EMBODIMENT OF THE INVENTION**

The present invention relates to a communicative base station switching system of a portable terminal for switching a communicative base station to neighbor base stations while in motion. The system of the present invention includes a received electric field measuring section for measuring the received electric fields from the communicative base station and the neighbor base stations. A received electric field memory section stores received electric field patterns of the communicative base station and two given neighbor stations measured in the received electric field measuring section whenever the communicative base station for communication for a first time is switched over to one of the neighbor base stations.

A received electric field pattern comparing section compares the received electric field patterns of the communicative base station and the two given neighbor stations and the received

electric field patterns stored in the received electric field memory section whenever the received electric fields from the communicative base station having been in communication with the portable terminal before and the two given neighbor base stations are measured in the received electric field measuring section. A base station position acquiring and switching means acquires the position of a neighbor station, which the portable terminal is moving toward, in correspondence to a stored received electric field, which is found in the received electric field pattern comparing section to be identical in pattern with a measured received electric field, and switches the communicative base station over to the pertinent neighbor base station.

## II. CLAIM REJECTIONS BASED ON PRIOR ART GROUNDS

### A. Claim 1-6:

Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chung. Applicant respectfully traverses this rejection for at least the following reasons.

As set forth above, the system according to the present invention includes a comparing section for comparing the received electric field patterns of the communicative base station and two given neighbor stations with the received electric field patterns stored in the received electric field memory section. A base station position acquiring and switching means then acquires the position of a neighbor station that the portable terminal is moving toward in correspondence to a stored received electric field, which is found in the comparing section to be identical in pattern with a measured received electric field. Accordingly, the base station position acquiring and switching means switches the communicative base station over to the pertinent neighbor base station.

For example, independent claim 1 recites, *inter alia*, a communicative base station switching system comprising:

a received electric field pattern comparing section for comparing the received electric field patterns of the communicative base station and the two given neighbor stations and the received electric field patterns stored in the received electric field memory

section whenever the received electric fields from the communicative base station having been in communication with the portable terminal before and the two given neighbor base stations are measured in the received electric field measuring section;

a base station position acquiring and switching means for acquiring the position of a neighbor station, which the portable terminal is moving toward, in correspondence to a stored received electric field, which is found in the received electric field pattern comparing section to be identical in pattern with a measured received electric field, and switching the communicative base station over to the pertinent neighbor base station.

(Emphasis added.)

The Office Action alleges that Chung discloses a received electric field pattern comparing section as claimed in claim 1 and cites Figure 3, step 13 (see also, col. 5, lines 11-18) in support of this position. However, Applicant respectfully submits that the Office Action has mischaracterized the Chung reference.

For example, Chung discloses a handoff trial method by a mobile station that compares a pilot power strength of a base station providing communication service to the mobile station with a pilot power strength of a neighboring base station and attempts to handoff if the difference is larger than a pilot threshold. That is, Figure 3 of Chung merely compares the pilot power strength of the base station with that of a single neighboring base station, and then performs a handoff based on the relationship of these to a pilot threshold.

Chung does not, however, disclose or suggest at least “a received electric field pattern comparing section for comparing the received electric field patterns of the communicative base station and the two given neighbor stations and the received electric field patterns stored in the received electric field memory section”, as recited in claim 1. Instead, Chung merely compares the pilot power strength of the base station to a single neighboring base station.

It is noted that Figures 4 and 5 of Chung disclose measuring and storing the pilot power strength of more than two neighboring base stations. However, as shown, for example, in step ST23 in Figure 5 (see also, col. 6, lines 43-44), Chung merely selects the single least pilot power

strength from the stored pilot power strengths for comparison with the pilot power strength of the base station based on a pilot threshold value. On the other hand, as shown for example, in step ST32 in Figure 6 (see, e.g., col. 7, lines 26-27), Chung merely selects the single largest pilot power strength from the stored pilot power strengths for comparison with all of the remaining base stations.

Thus, Chung clearly does not disclose or suggest at least “a received electric field pattern comparing section for comparing the received electric field patterns of the communicative base station and the two given neighbor stations and the received electric field patterns stored in the received electric field memory section”, as recited in claim 1. Accordingly, Applicant submits that independent claim 1 clearly is not anticipated by Chung.

Claims 2-4 are patentable over Chung at least by virtue of their dependency from claim 1. Claims 2-4 also are patentable separately and independently over Chung at least by virtue of the additional recitations recited therein.

As for claim 5, Applicant submits that Chung fails to disclose or suggest all of the recitations of claim 5. For example, claim 5 recites, *inter alia*, a communicative base station switching method comprising:

comparing the received electric field patterns of the communicative base station and the two given neighbor stations and the received electric field patterns stored in the received electric field memory section whenever the received electric fields from the communicative base station having been in communication with the portable terminal before and the two given neighbor base stations are measured in the received electric field measuring section;....

(Emphasis added.)

As mentioned above, Chung clearly does not disclose or suggest “comparing the received electric field patterns of the communicative base station and the two given neighbor stations and the received electric field patterns stored in the received electric field memory section”. Instead, Chung merely compares the pilot power strength of the base station to that of a single neighboring base station.

Thus, Applicant submits that claim 5 also is not anticipated by Chung.

As for independent claim 6, it is noted that the Office Action does not identify any support for the elements of this claim in the cited reference. Thus, Applicant respectfully submits that the anticipation rejection of claim 6 has not been established, and therefore, is improper.

Nevertheless, Applicant submits that Chung clearly does not disclose or suggest all of the recitations of claim 6, and therefore, does not anticipate claim 6.

For example, claim 6 recites, *inter alia*:

- a base station memory section for storing base station position data;
- a base station position comparing section for receiving position data from a global positioning system of a mobile body and obtaining and comparing the distances of the base stations from the portable terminal by using the received position data as the position data of the portable terminal; and
- a base station frequency switching section for switching the communicative base station of the portable terminal to the neighbor base station closest to the portable terminal according to the result of comparison in the base station position comparing section.

(Emphasis added.)

Chung neither discloses nor suggests these recitations. In fact, Chung does not mention, teach, or suggest obtaining position data or comparing the distances between the base stations and the portable terminal. Instead, Chung merely teaches calculating an offset and power strength of a pilot signal from the base station and comparing the pilot power strength with a pilot power strength of a single neighboring base station to determine whether handoff or call-cut are appropriate (see, e.g., col. 5, lines 6-18). Thus, Chung does not disclose or suggest all of the recitations of claim 6, and accordingly, does not anticipate claim 6.

As an aside, Applicant notes that, if the Examiner wishes to maintain this rejection of claim 6, the Examiner should cite support for this rejection in the cited reference.

For at least the foregoing reasons, Applicant submits that claims 1-6 clearly are not

anticipated or rendered obvious by Chung. Thus, the Examiner respectfully is requested to withdraw this rejection and permit claims 1-6 to pass to allowance.

**B. Claim 7:**

Claim 7 stands rejected under 35 U.S.C. § 102(b) as being unpatentable over Israelsson.

Applicant respectfully traverses this rejection for at least the following reasons.

Claim 7 recites, *inter alia*, a communicative base station switching system in which:

base station position data and portable terminal position data  
are obtained,  
distances of base stations from the portable terminal are  
obtained on the basis of the obtained position data, and  
the communicative base station of the portable terminal is  
switched to a neighbor base station located closest to the portable  
terminal.

(Emphasis added.)

The Office Action alleges that Israelsson discloses all of the elements of claim 7 and cites Figure 3, element MSC, and col. 3, lines 8-22, in support of this position. Applicant respectfully disagrees and submits that the Office Action mischaracterizes the Israelsson reference.

Israelsson discloses a handoff method from a first base station in a mobile radio communication system, in which the signal strengths from a set of base stations surrounding a mobile station are measured, not base station position data and distances of the base stations from the portable terminal.

In fact, Israelsson does not mention, teach, or suggest measuring base station position data and distances of the base stations from the portable terminal. Instead, Israelsson merely discloses that the signal strength vector formed by the measured signal strengths is correlated with stored characteristic signal strength vectors associated with the first base station.

Thus, Israelsson clearly does not disclose or suggest all of the recitations of claim 7, and therefore, neither anticipates nor renders obvious claim 7. The Examiner respectfully is requested to withdraw this rejection and permit claim 7 to pass to allowance.

### **III. NEW CLAIMS**

New claims 8-14 are added to provide more varied protection for the present invention. Claims 8-14 are allowable over the cited art for at least reasons that are analogous to the reasons set forth above with respect to claims 1-7.

### **IV. FORMAL MATTERS AND CONCLUSION**

The Office Action objects to claim 7 because of informalities. Claim 7 has been amended to correct the informalities. The Examiner respectfully is requested to withdraw this objection.

In view of the foregoing, Applicant submits that claims 1-14, all the claims presently pending in the application, are patentably distinct over the prior art of record and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.


Serial No. 09/866,714  
Docket No. 2000P163824

16

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Attorney's Deposit Account No. 50-0481 and please credit any excess fees to such deposit account.

Respectfully Submitted,

Date: February 23, 2004

  
John J. Dresch, Esq.  
Registration No. 46,672

Sean M. McGinn  
Registration No. 34,386

**McGinn & Gibb, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
**Customer No. 21254**